



900 MHz 9 dBi SS Yagi Antenna

Antennas Technical Data Sheet

PE51YA1012

Features

- 9 dBi gain & all weather steel construction provides superior performance
- Can be installed for either vertical or horizontal polarization
- Solid Stainless Steel 1/8" elements
- Heavy-duty 1/2" stainless steel boom
- 18 inch coax lead & 1/8" thick plated steel mounting plate

Applications

- 900MHz ISM Band & Wireless LAN systems
- Point to multipoint & Non Line of Sight (NLOS) applications
- 900MHz Cellular and GSM
- RFID & SCADA
- Wireless Video Links

Description

The HyperGain PE51YA1012 High-Performance Yagi Antenna combines high gain with a wide beam-width. They are ideally suited for directional applications in the 900MHz ISM and GSM bands. Typical applications include 900MHz Wireless LAN, SCADA, Wireless Video Links, 900 MHz Cellular, Non Line of Sight (NLOS) applications and point to multi-point systems. External interference of this antenna is minimized due to the excellent front to back ratio. It can be installed for either vertical or horizontal polarization.

This antenna features a heavy-duty 1/2" stainless steel boom and solid 1/8" elements. Secure mounting is assured by a 1/8" thick plated steel mounting plate and two plated steel U-bolts. It comes with a 18" coax lead terminated with an N-Female connector.

Configuration

Design	Yagi
Band Type	Wide
Radiation Pattern	Directional
Polarization	Vertical or Horizontal
Cable Length	18 in [457.2 mm]
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Short

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		9		dBi
Front to Back Ratio		14		dB
Input Power			100	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	890-960					MHz

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 9 dBi SS Yagi Antenna PE51YA1012](#)



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Gain	9	dBi
Horizontal Beam Width	54	Degees
Vertical Beam Width	48	Degees
Maximum Input Power	100	Watts

Mechanical Specifications

Size

Overall Length	19.6 in [497.84 mm]
Mounting Mast Diameter	2 in [50.80 mm]
Weight	1.8 lbs [816.47 g]

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Wind Loading	135 MPH [217.26 KPH]

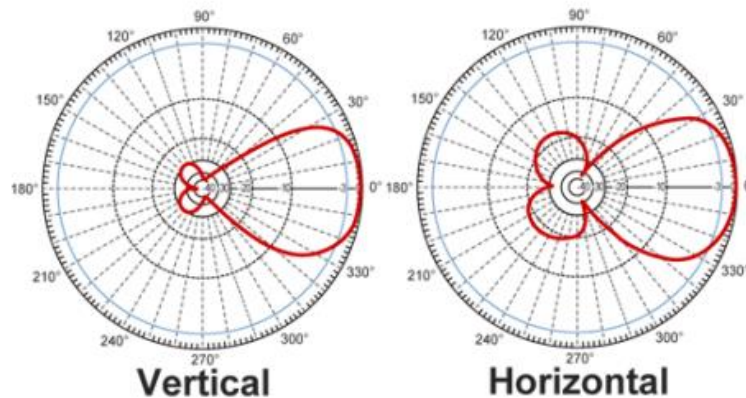
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Radiation Pattern

RF Antenna Gain Patterns



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900 MHz 9 dBi SS Yagi Antenna from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 9 dBi SS Yagi Antenna PE51YA1012](https://www.pasternack.com/wide-antenna-9-dbi-gain-n-pe51ya1012-p.aspx)

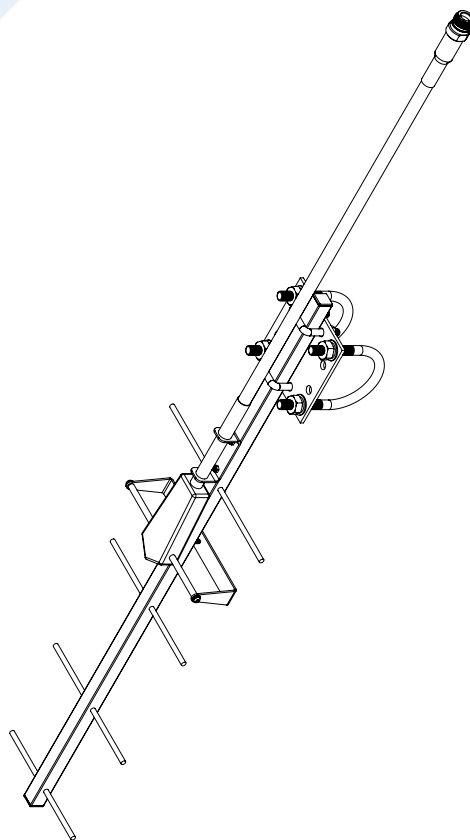
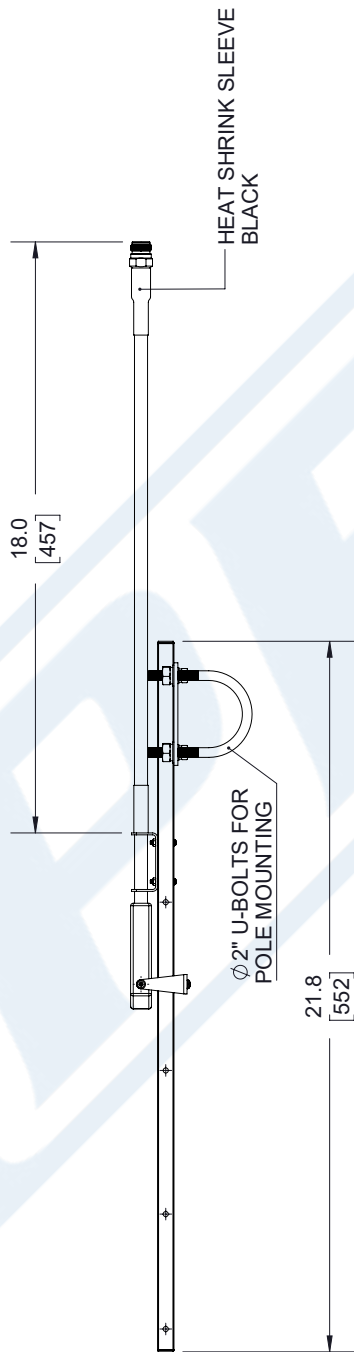
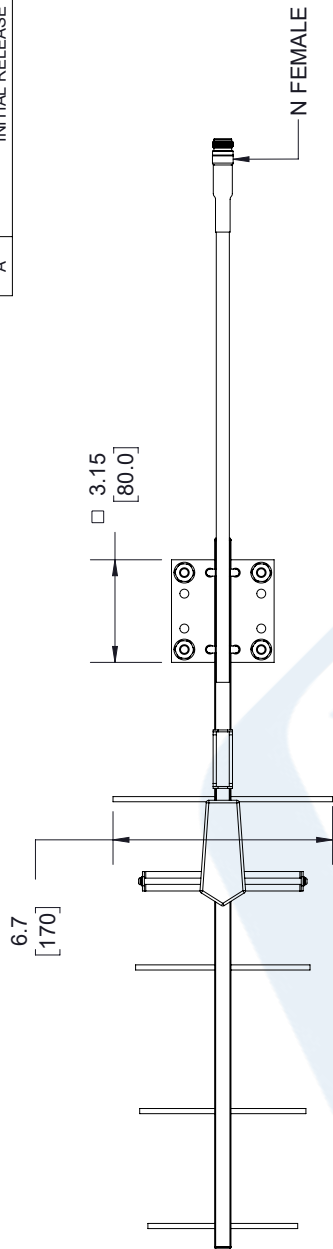
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PE51YA1012 CAD Drawing

900 MHz 9 dBi SS Yagi Antenna

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	2/21/2020
		APPROVED
		M.MILLER



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32
.XX = ±.02 [.51]	ANGLES ± 1°
.XXX = ±.005 [.13]	

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	±.1 [25] / -0
12 [305] < L ≤ 60 [1524]	±.2 [51] / -0
60 [1524] < L ≤ 120 [3048]	±.4 [102] / -0
120 [3048] < L ≤ 300 [7620]	±.6 [152] / -0
300 [7620] < L	±.9% L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO PE51YA1012

SIZE A

CAGE CODE 53919

DRAWN BY K.DANG

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